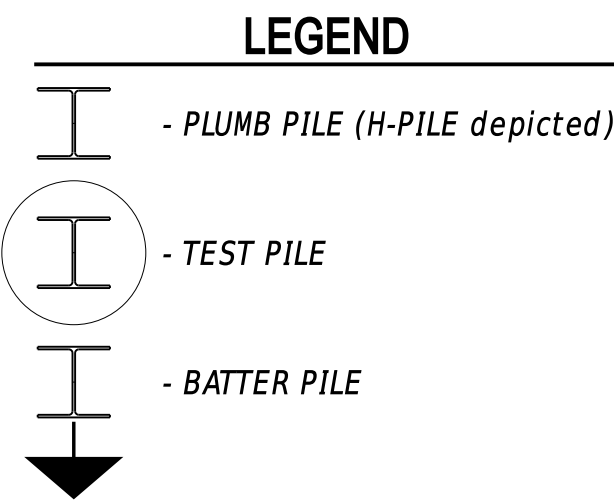


ABUTMENT (name) FOOTING PLAN

See Designer Note 7

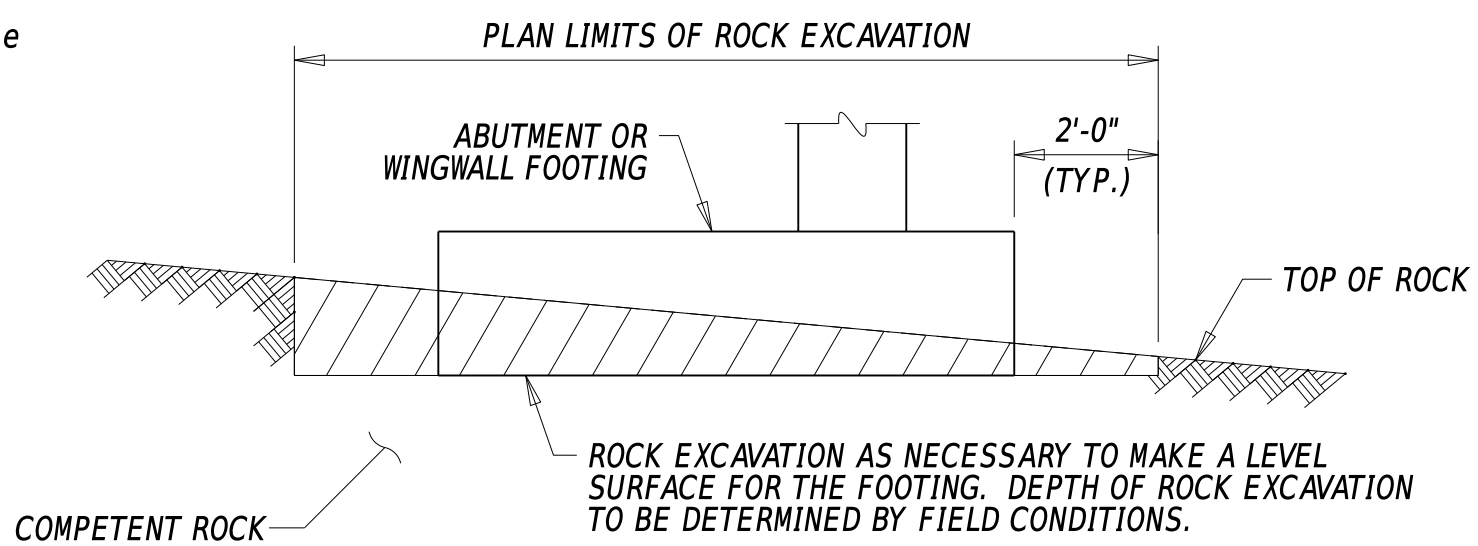
SEE DESIGNER NOTE #2 FOR PILE COORDINATE AND WORKING POINT NAMING CONVENTION

ABUTMENT PILE COORDINATES					ABUTMENT PILE COORDINATES				
POINT	STATION	OFFSET	NORTHING	EASTING	POINT	STATION	OFFSET	NORTHING	EASTING
P01	xx+xx.xx	(-)xx.xx	xxxxxx.xx	xxxxxx.xx					



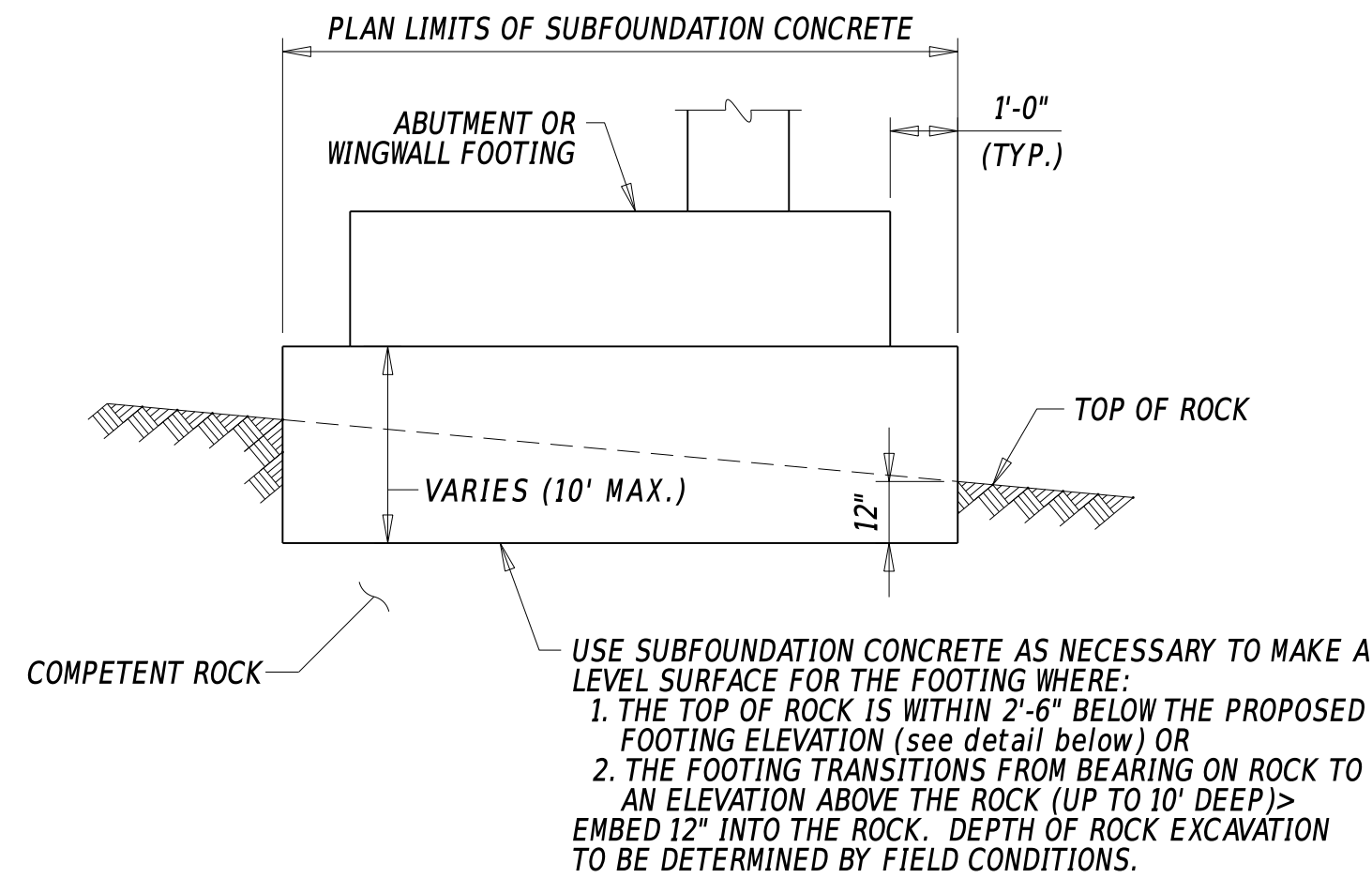
SEE DESIGNER NOTE #2 FOR PILE COORDINATE AND WORKING POINT NAMING CONVENTION

ABUTMENT WORKING POINTS					ABUTMENT WORKING POINTS				
POINT	STATION	OFFSET	NORTHING	EASTING	POINT	STATION	OFFSET	NORTHING	EASTING
WP01	xx+xx.xx	(-)xx.xx	xxxxxx.xx	xxxxxx.xx					

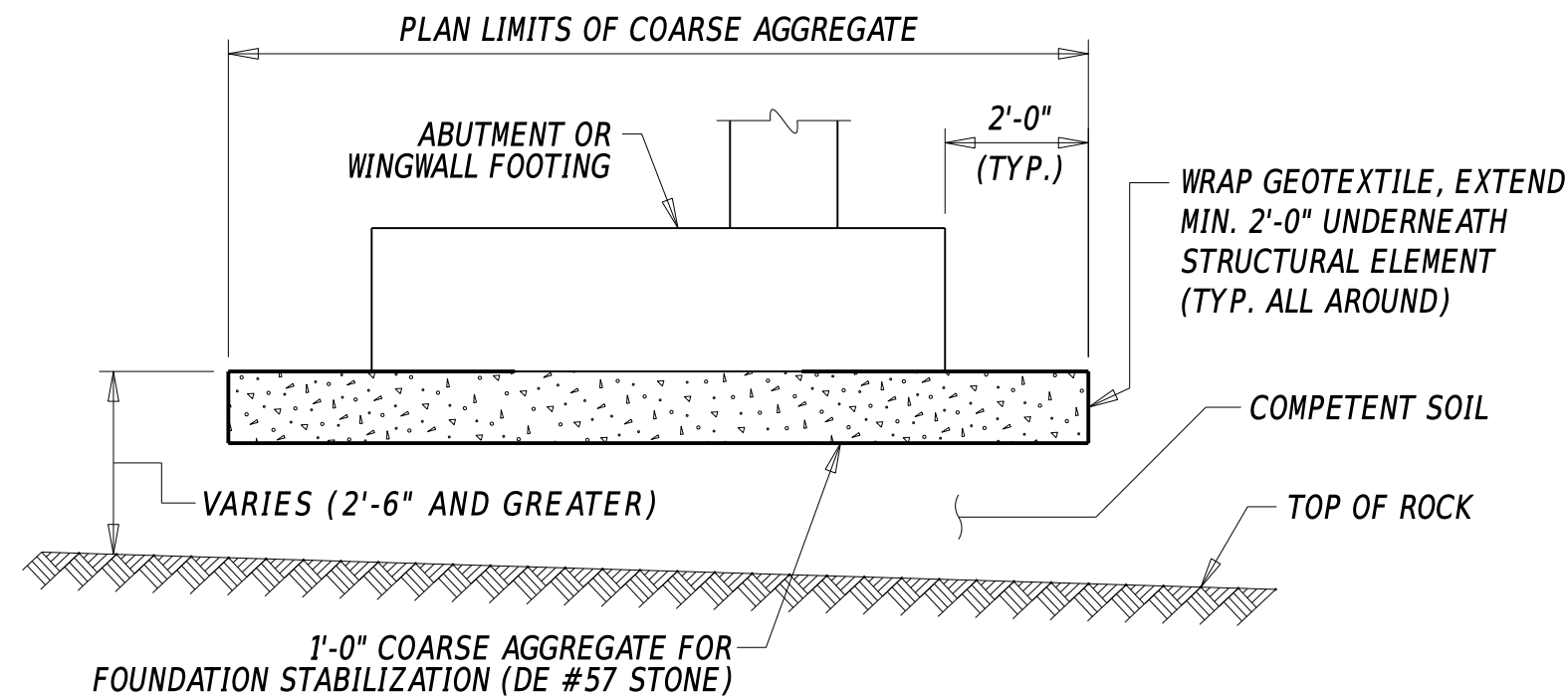


ROCK EXCAVATION

NOTE: WHERE ROCK EXCAVATION EXCEEDS 2'-0" DEPTH, CONSIDER A STEP IN THE FOOTING.



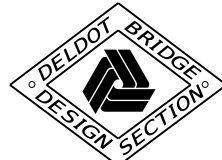
SUBFOUNDATION CONCRETE

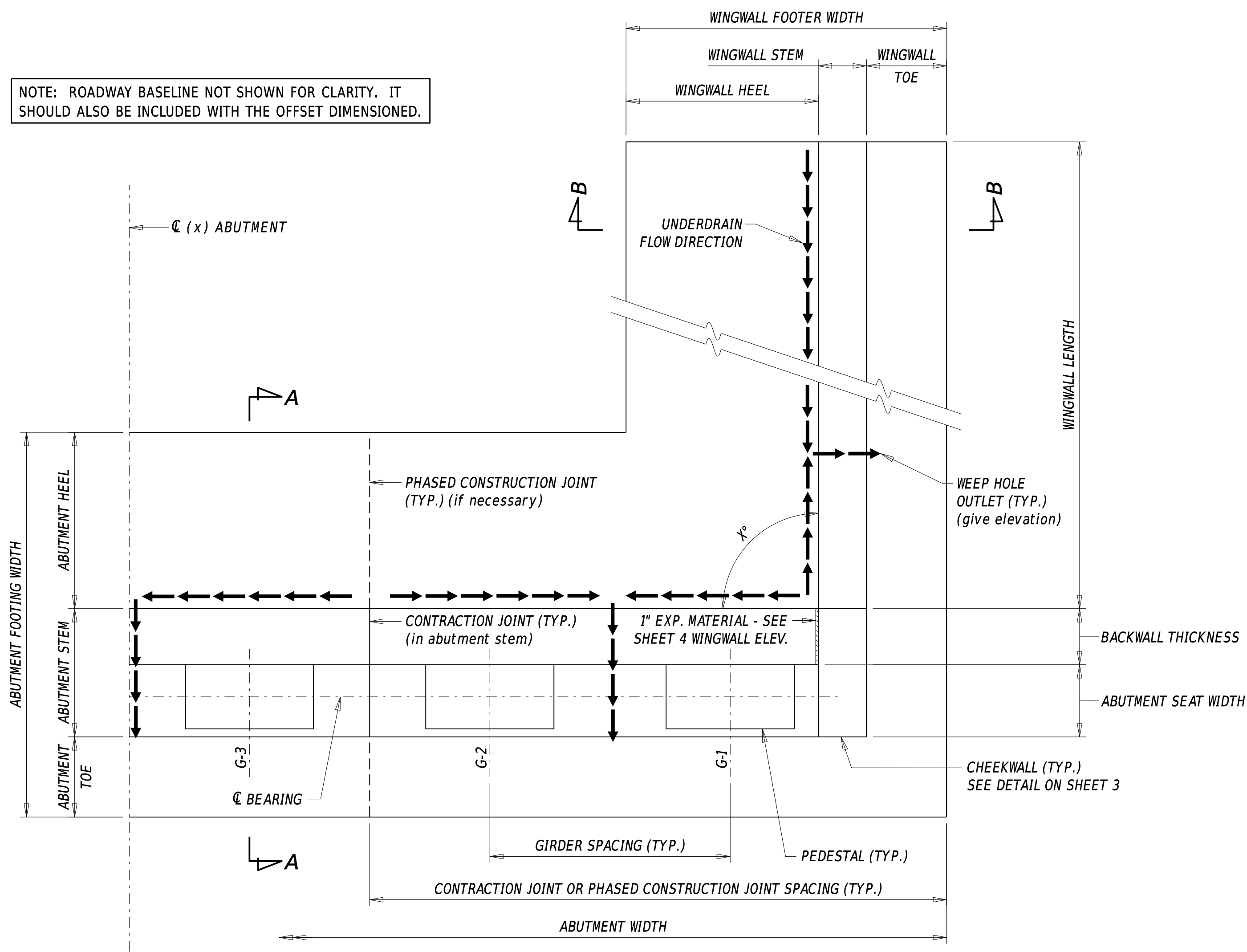


FOUNDATION STABILIZATION (where entire footing is above rock)

NOTE: WHERE THERE IS UNSUITABLE SOIL BETWEEN THE FOOTING AND ROCK, USE SUBFOUNDATION CONCRETE UP TO 10' DEPTH.

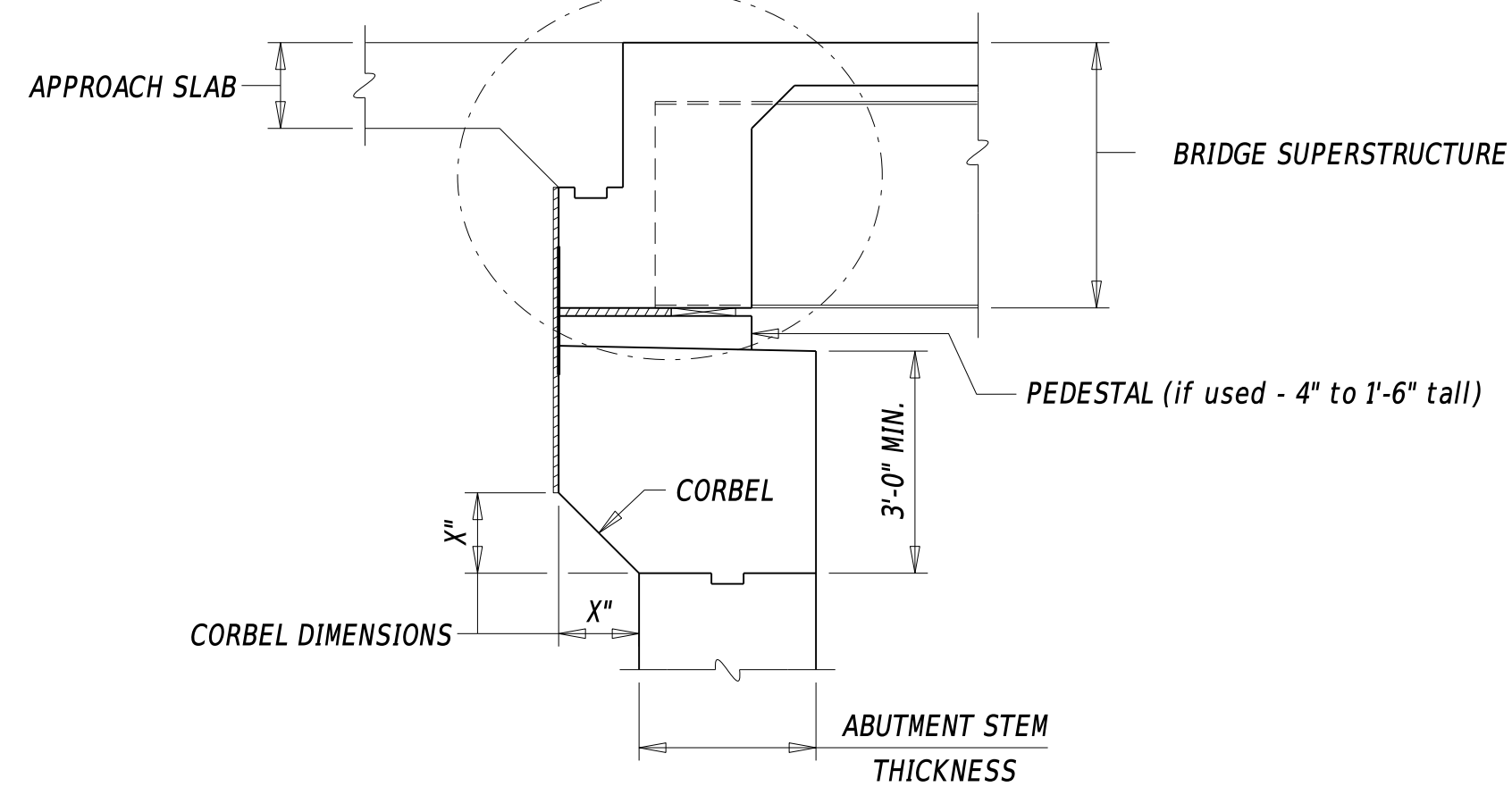
SHALLOW FOUNDATION DETAILS





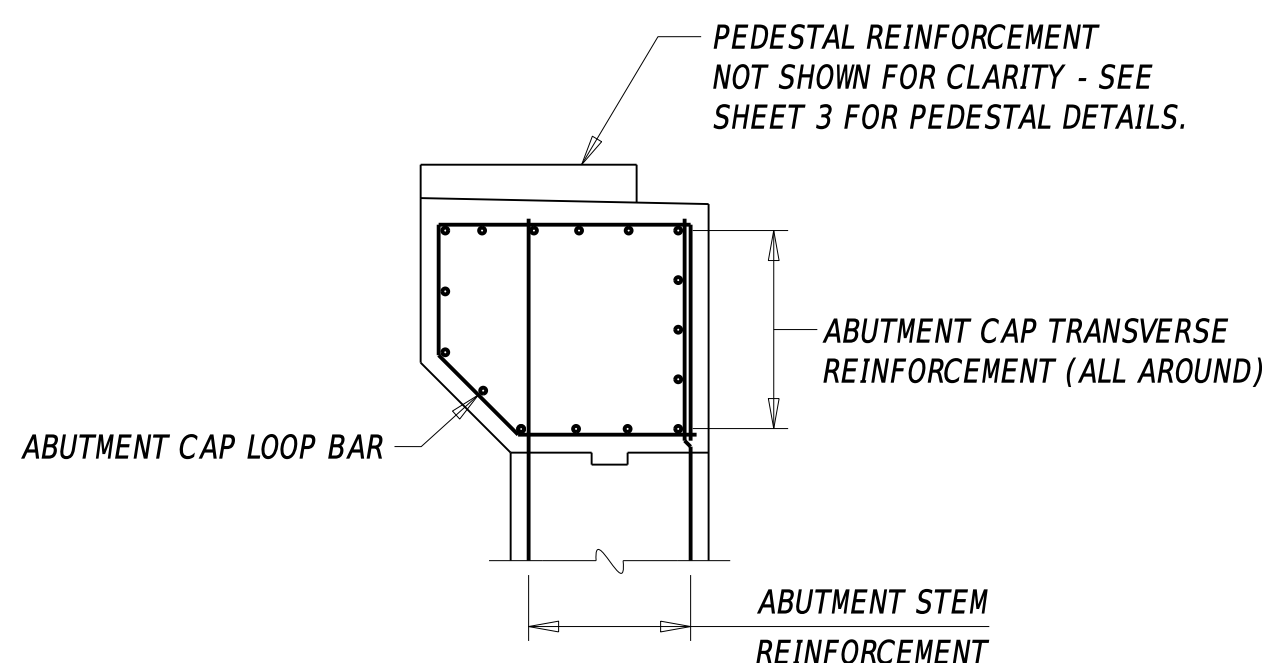
ABUTMENT HALF PLAN

NOTE: THIS EXAMPLE DEPICTS ABUTMENT TYPE IIC WITH A CONVENTIONAL ABUTMENT AS DESCRIBED IN BDM 103.6.2 AND AS SHOWN ON DETAIL 325.01 SHEET 3 'END DIAPHRAGM SECTION' AND DETAIL 325.03 SHEET 1 SECTION A-A.

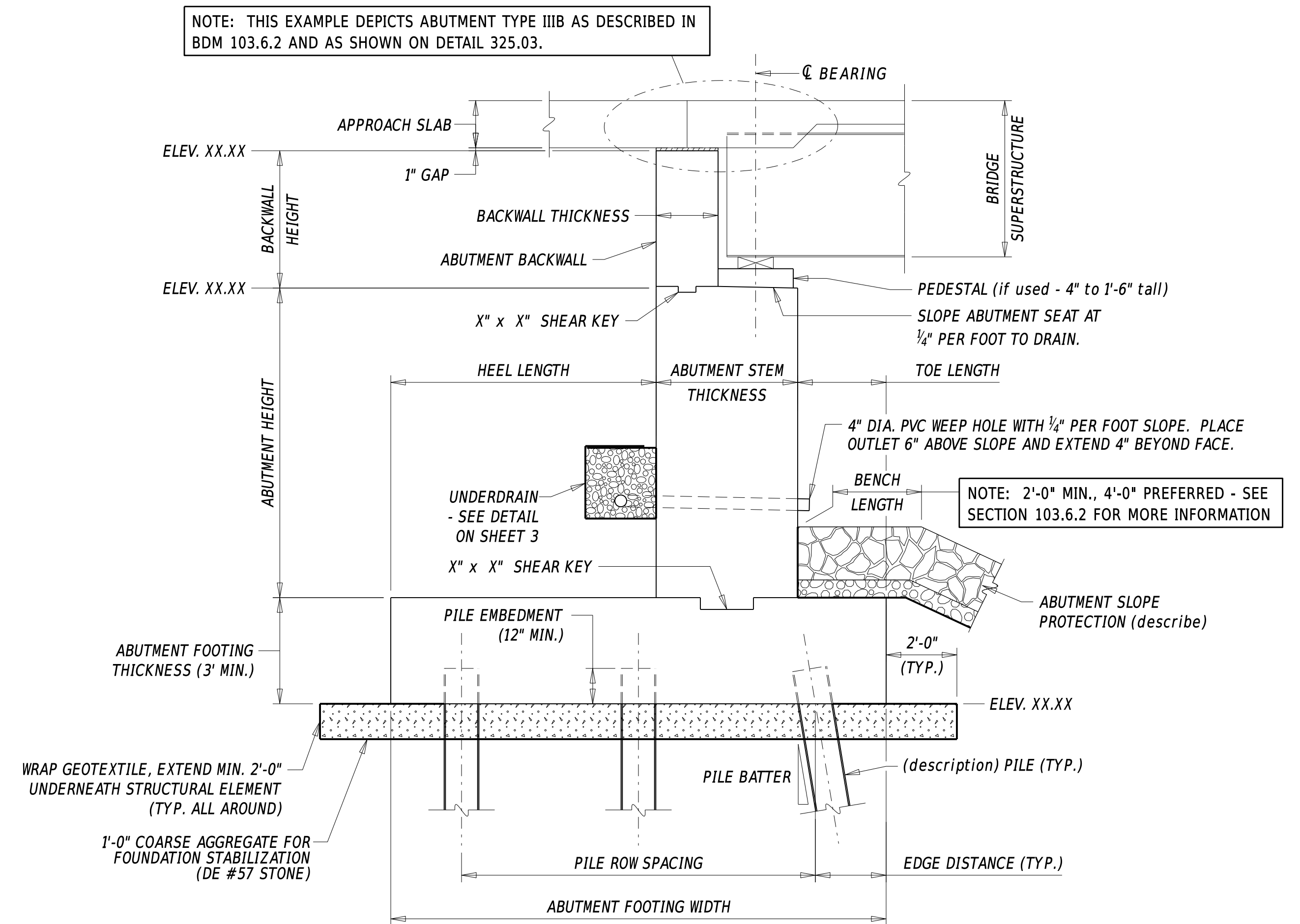


ABUTMENT SECTION (ALTERNATE)

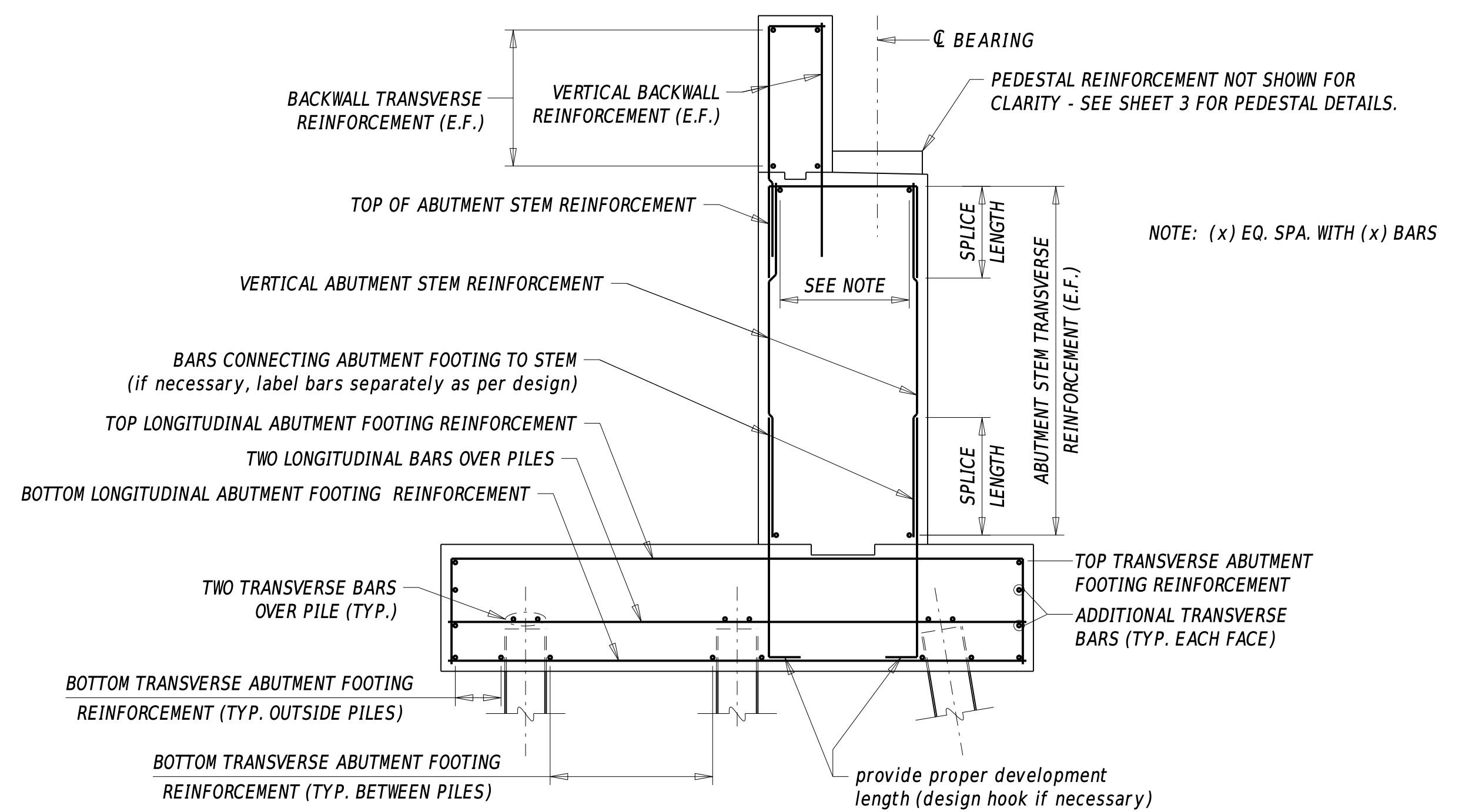
NOTE: SEE DETAIL 325.01 FOR DIAPHRAGM DETAILS AND REINFORCEMENT



ABUTMENT REINFORCEMENT (ALTERNATE)

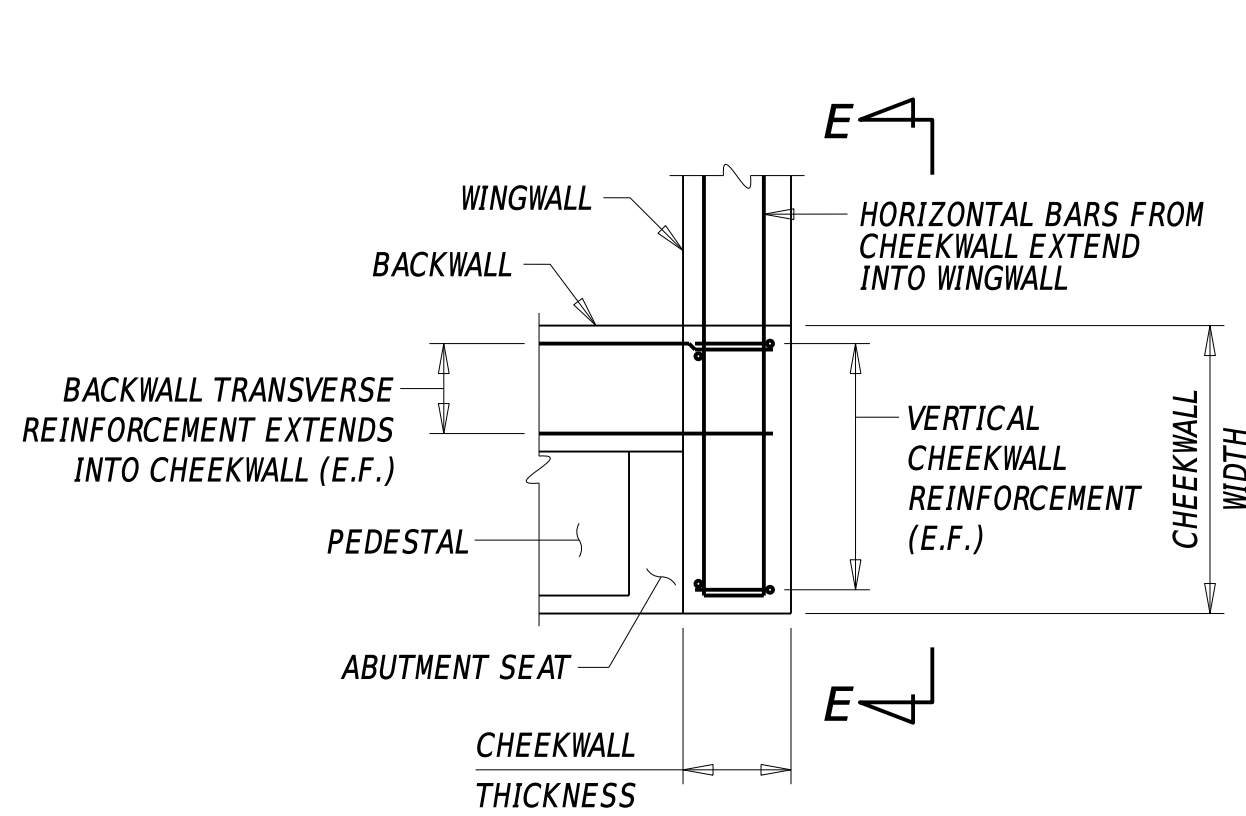


ABUTMENT SECTION (A-A)

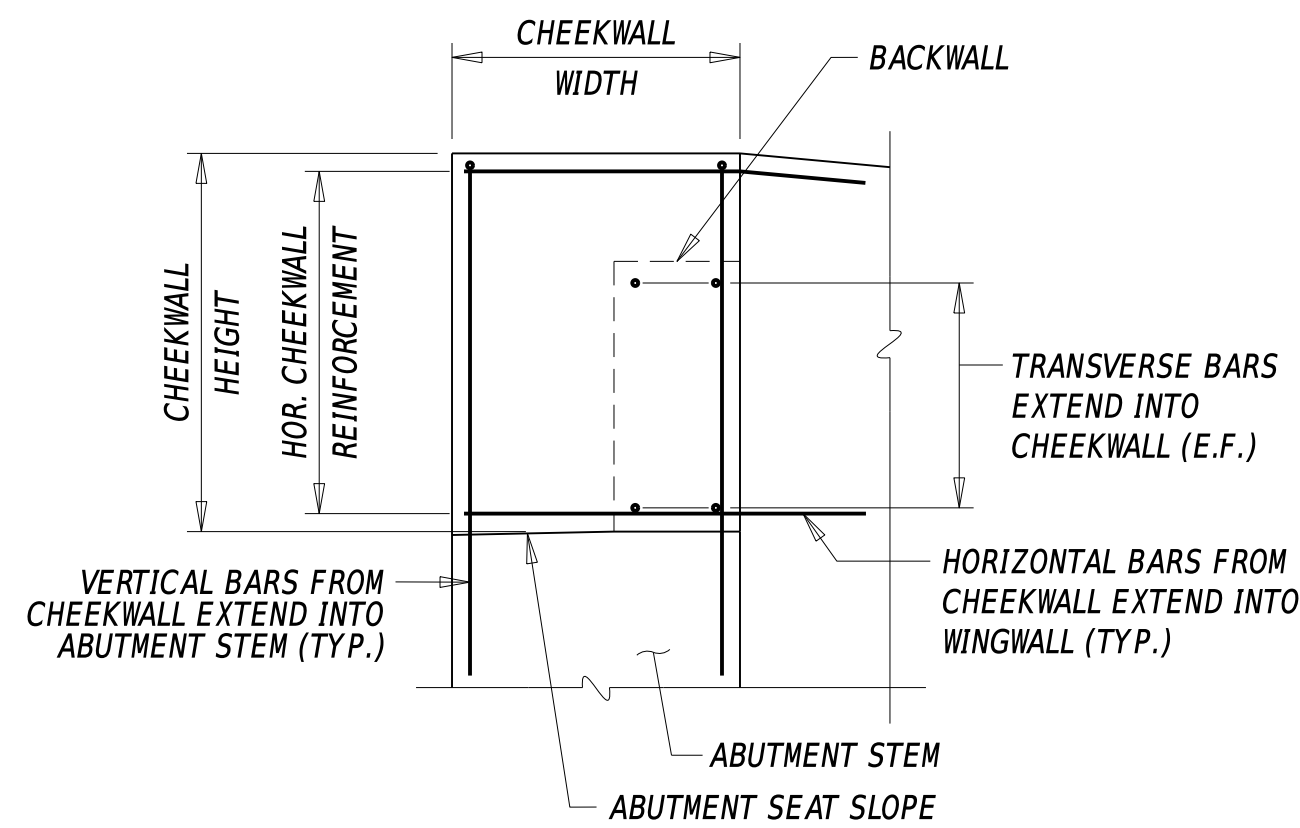


ABUTMENT REINFORCEMENT

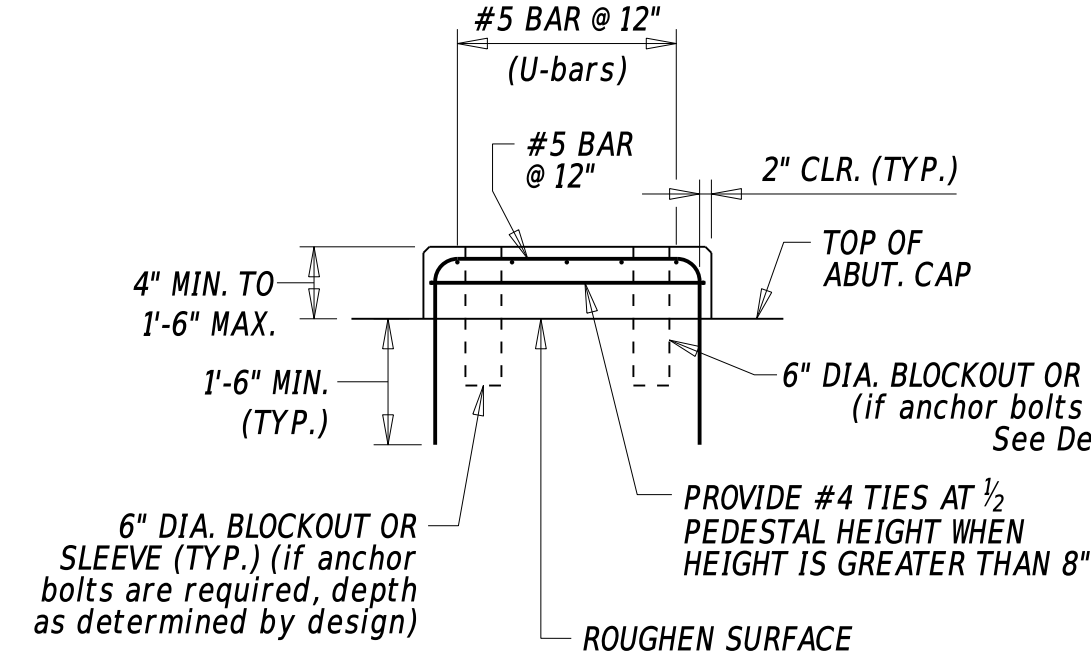




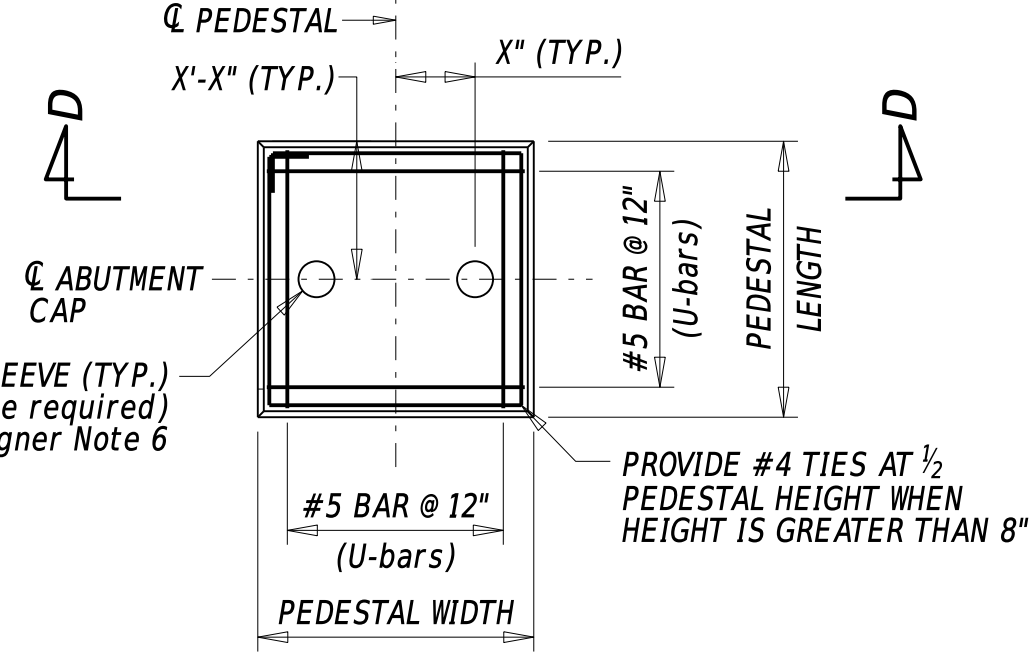
PLAN



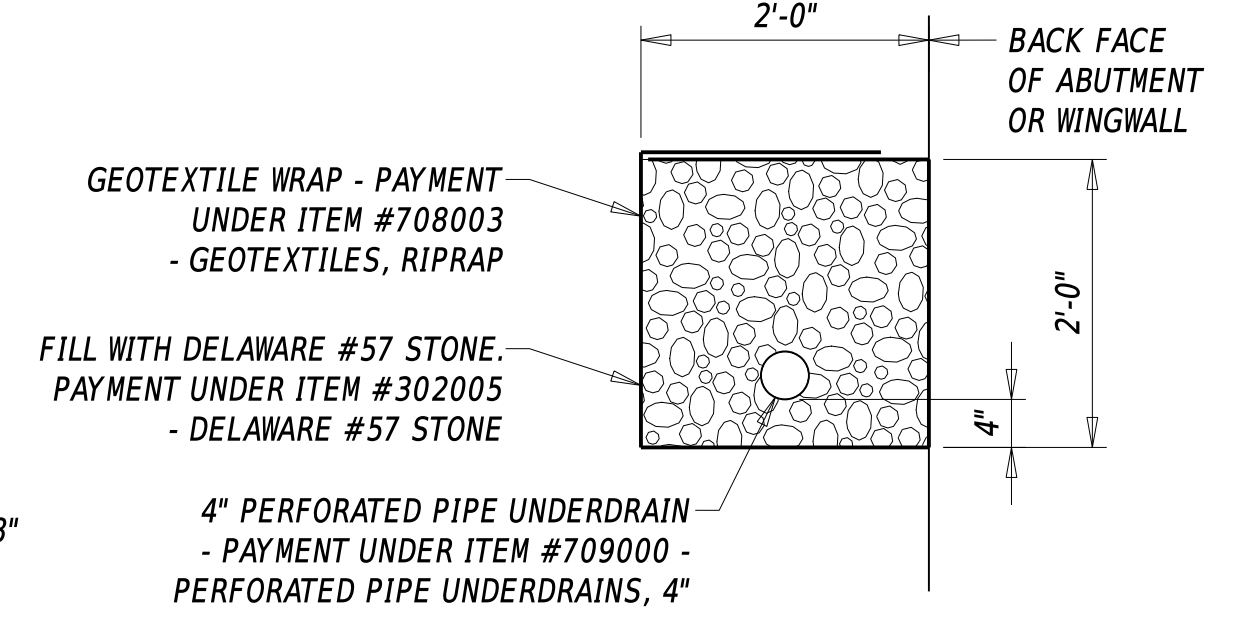
ELEVATION (E-E)



SECTION (D-D)



PLAN (C-C)



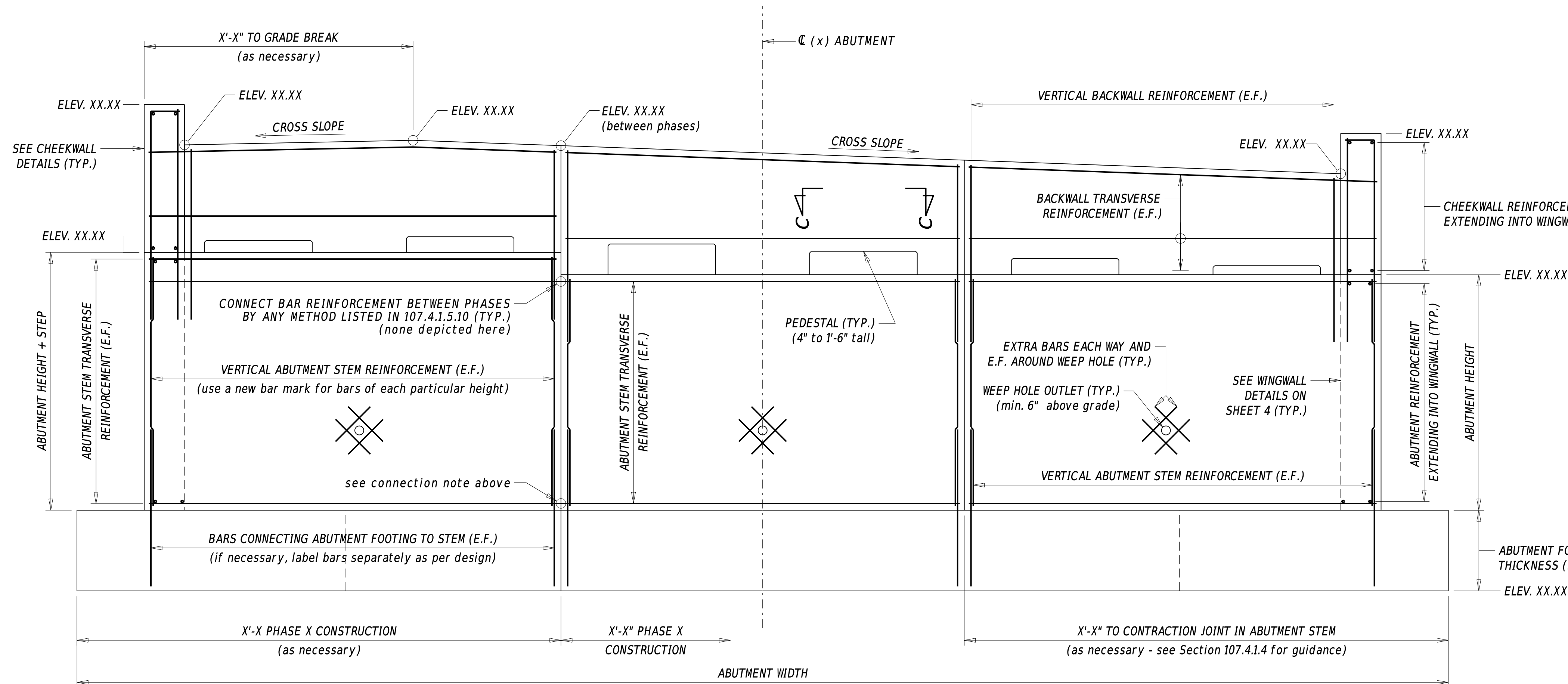
UNDERDRAIN DETAIL

CHEEKWALL DETAILS

NOTE: THIS EXAMPLE DEPICTS A CHEEKWALL USED WITH A CANTILEVER WINGWALL AS SHOWN ON SHEET 4. SEE 107.4.5.7 FOR MORE INFORMATION ON OTHER CONFIGURATIONS.

PEDESTAL DETAILS

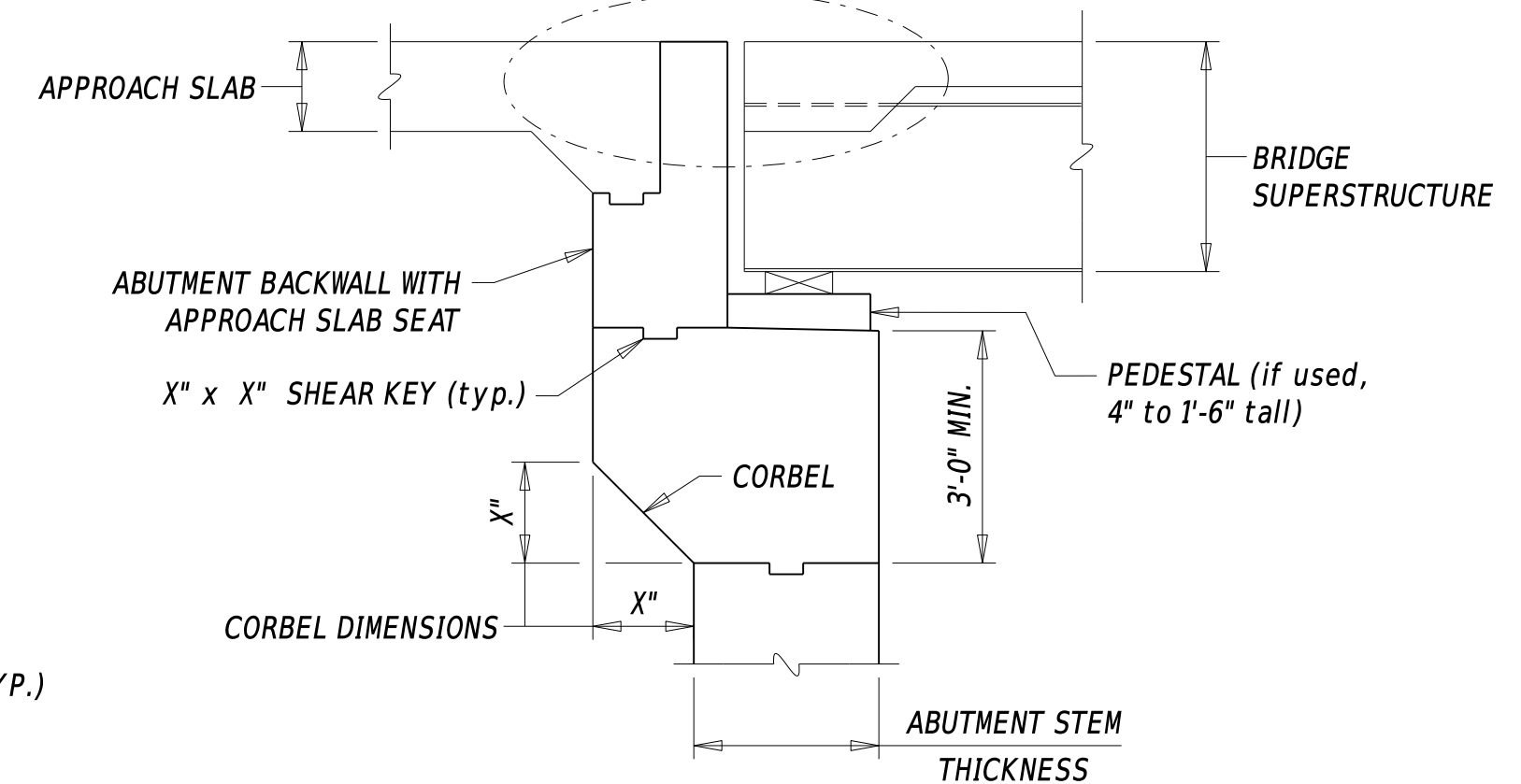
NOTE: THIS EXAMPLE DEPICTS ABUTMENT TYPE V AS DESCRIBED IN BDM 103.6.2 AND AS SHOWN ON DETAIL 325.01 SHEET 2 'TYPICAL SECTION AT ABUTMENTS' AND DETAIL 325.03 SHEET 1 SECTION A-A. ALSO SEE JOINT DETAILS ON DETAIL 340.01



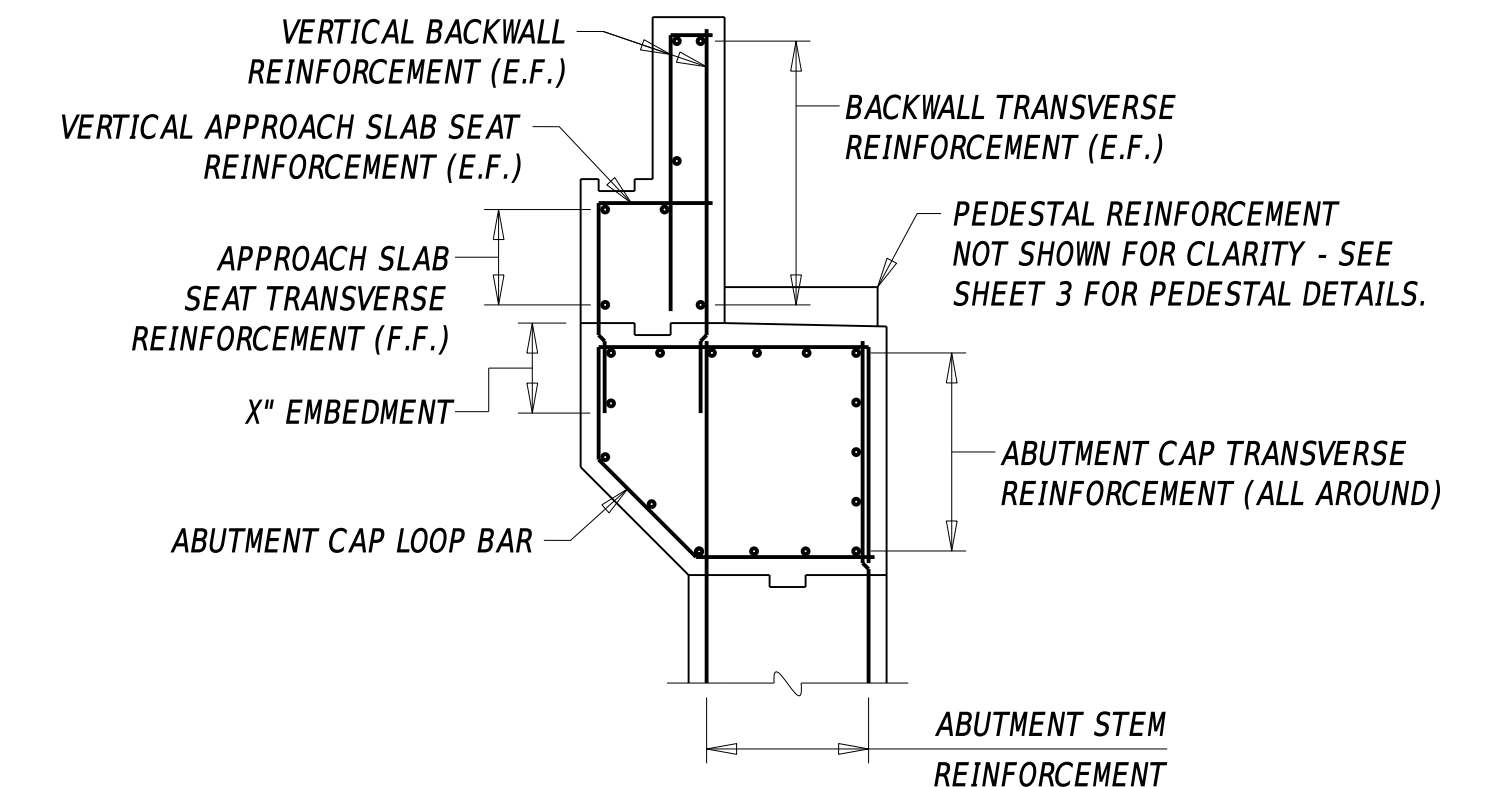
NOTE: THIS DETAIL LABELS EACH REINFORCING BAR IN ONE LOCATION ONLY. ON PLAN DETAILS, EACH BAR NEEDS TO BE LABELED IN EACH SECTION OR PHASE OF THE CONSTRUCTION.

NOTE: WINGWALL STEM AND ABUTMENT FOOTING REINFORCEMENT NOT SHOWN FOR CLARITY.

ABUTMENT ELEVATION

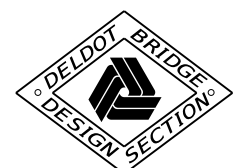


ABUTMENT SECTION (TYPE V ABUTMENT)

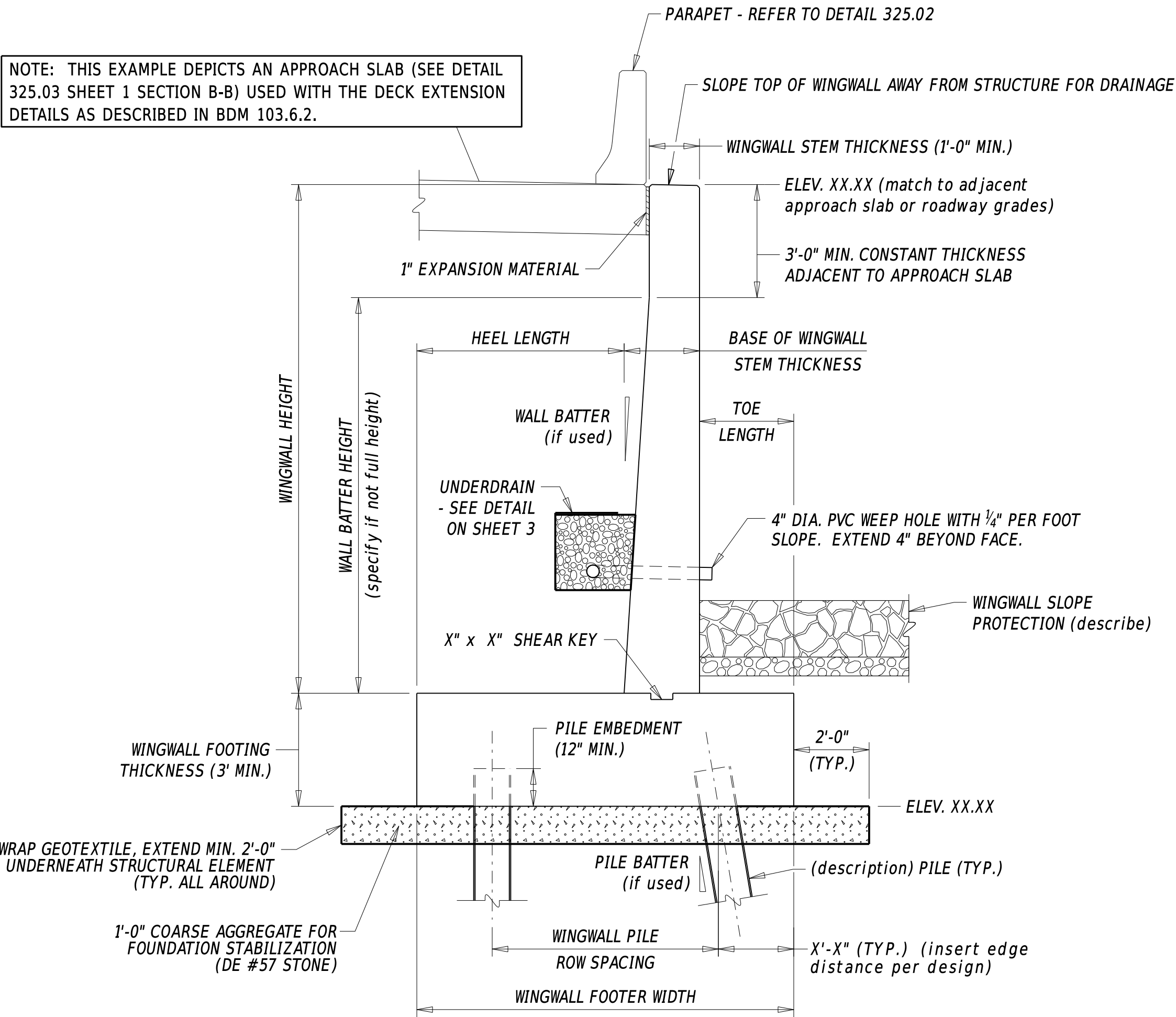


ABUTMENT REINFORCEMENT (TYPE V ABUTMENT)

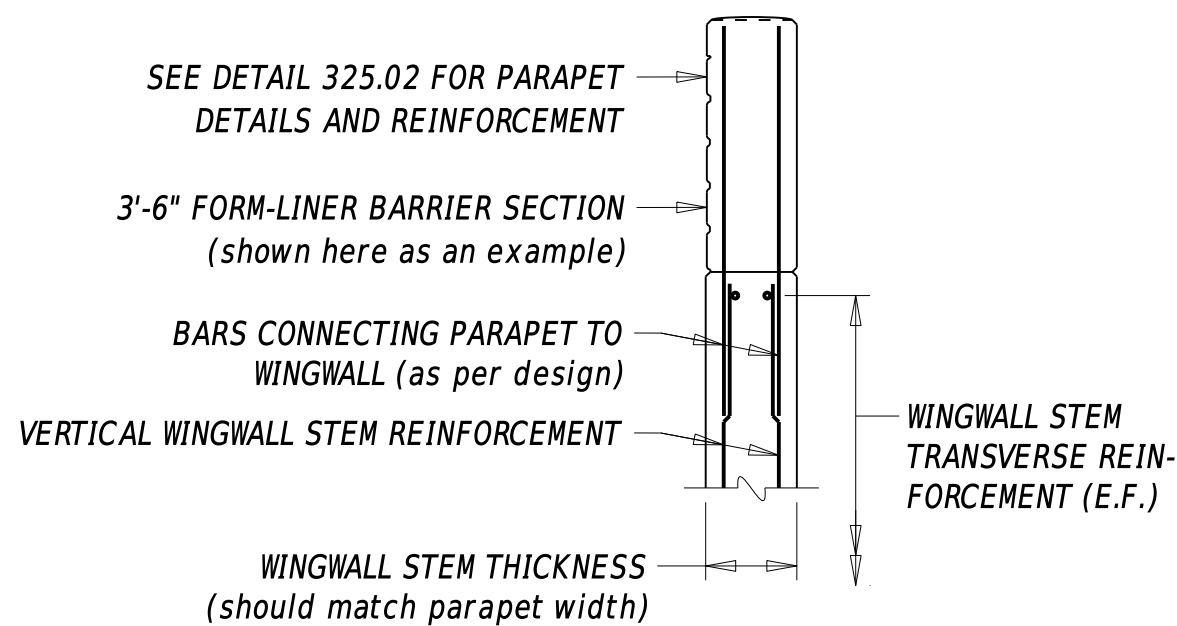
NOTE: TYPE V TRADITIONAL ABUTMENT IS DEPICTED HERE FOR REFERENCE PURPOSES AND USE ON REHABILITATION PROJECTS. SEE SECTION 103.6.2 FOR MORE INFORMATION ON THE USE OF THIS TYPE OF ABUTMENT.



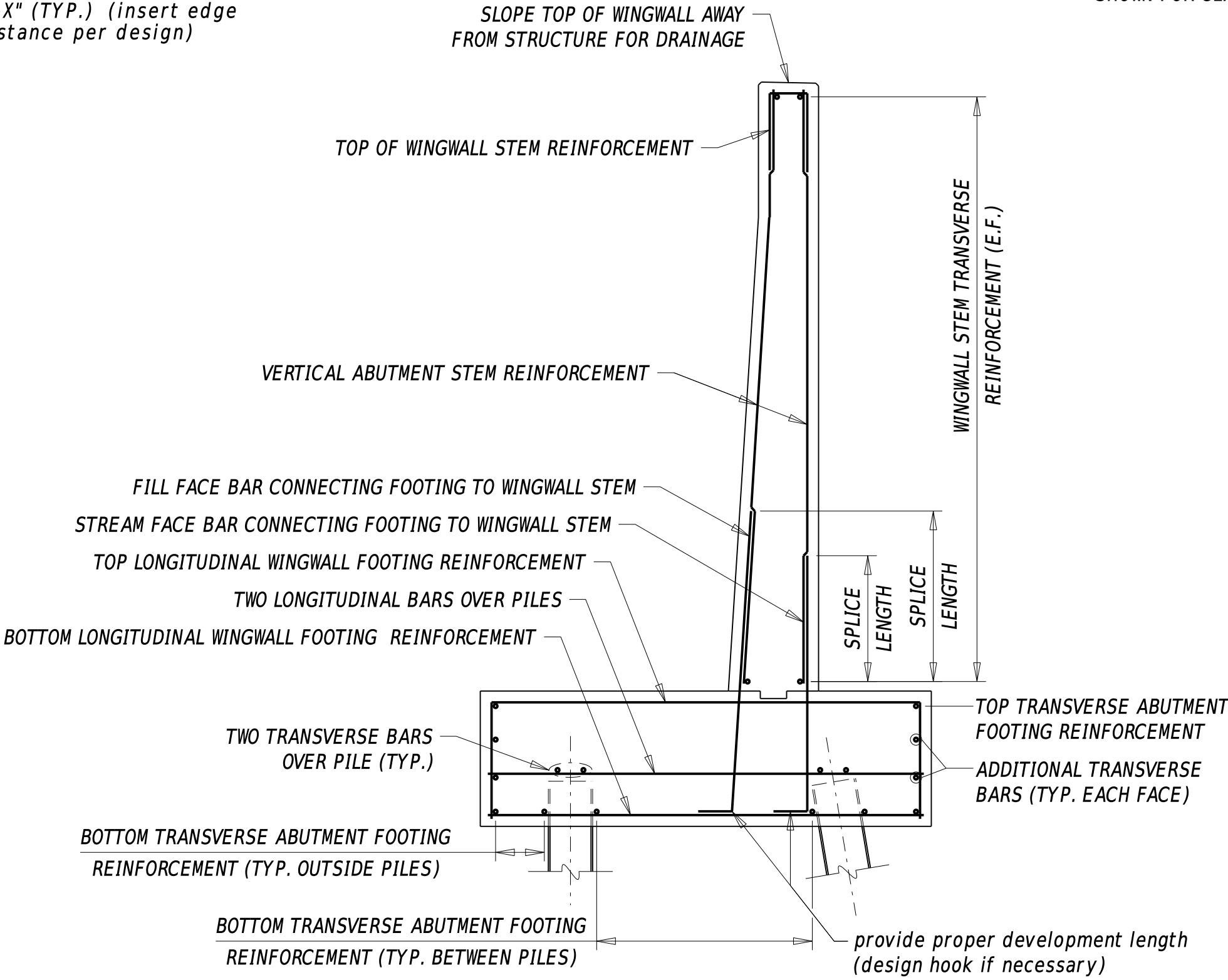
NOTE: THIS EXAMPLE DEPICTS AN APPROACH SLAB (SEE DETAIL 325.03 SHEET 1 SECTION B-B) USED WITH THE DECK EXTENSION DETAILS AS DESCRIBED IN BDM 103.6.2.



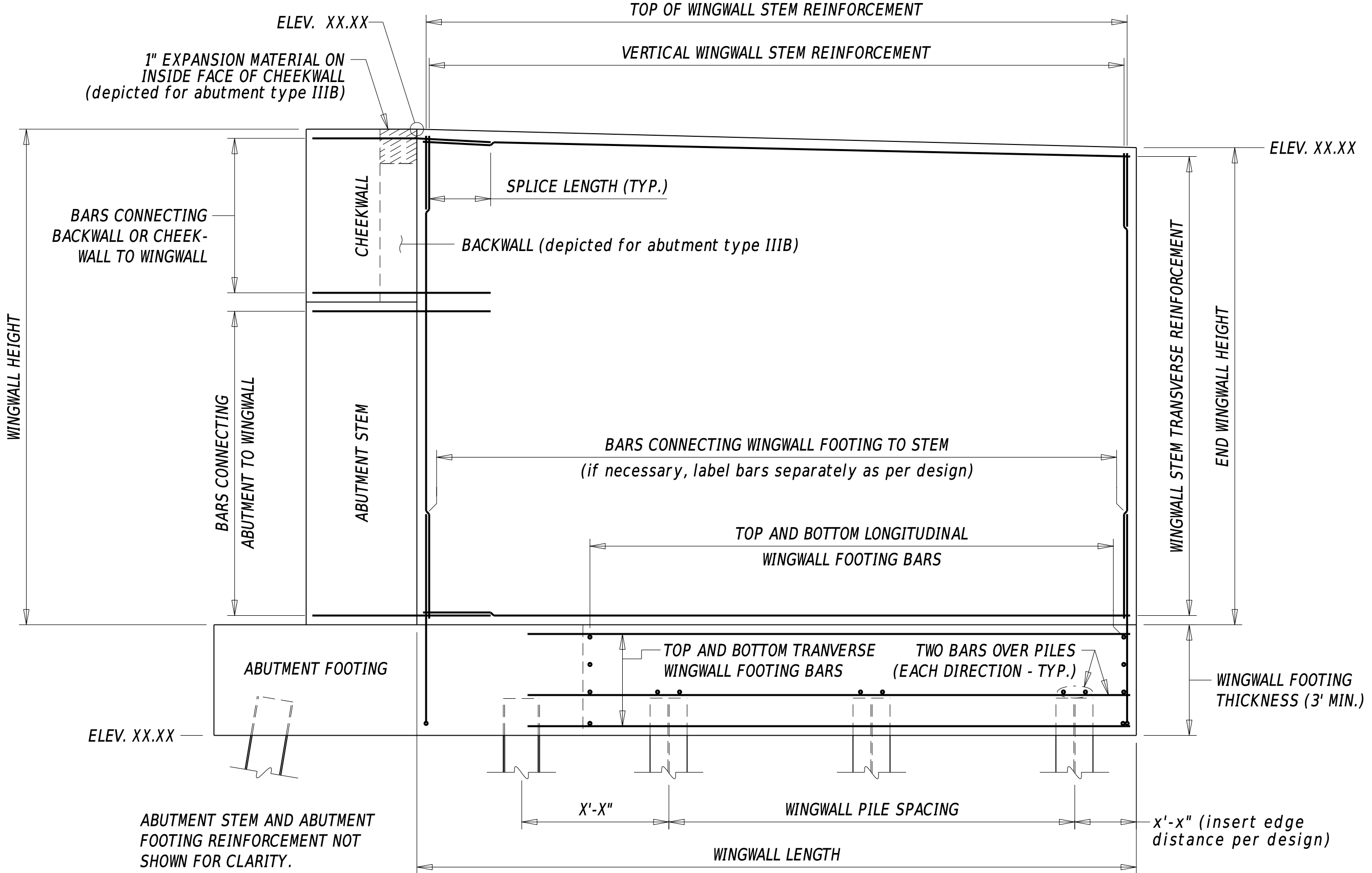
WINGWALL SECTION (B-B)



WINGWALL WITH PARAPET DETAIL



WINGWALL REINFORCEMENT



NOTE: WHERE REINFORCEMENT OR DIMENSIONS DIFFER BETWEEN WINGWALLS, PROVIDE A DETAIL FOR EACH ONE. IF WINGWALLS DIFFER ONLY SLIGHTLY IN ELEVATIONS, IT CAN BE LABELED ON ONE DETAIL.

WINGWALL ELEVATION

DESIGNER NOTES

- REFER TO SECTIONS 103.6.2, 107.4.1, 210 AND 211 FOR MORE INFORMATION ON ABUTMENT DESIGN.
- ON SMALL PROJECTS, PILE NUMBERS AND WORKING POINTS CAN USE A NUMERICAL SEQUENCE. FOR LARGE PROJECTS, ADD A SPECIFIC IDENTIFIER FOR EACH SUBSTRUCTURE ELEMENT SUCH AB-xx FOR AN ABUTMENT OR P1-xx, P2-xx FOR PIERS.
- STEEL H-PILES ARE DEPICTED IN THESE DETAILS AS THE PREFERRED OPTION FOR CANTILEVER ABUTMENTS. ALTERNATELY, PRECAST CONCRETE PILES OR CAST-IN-PLACE CONCRETE PILES MAY BE USED. THE DESIGNER SHOULD BE AWARE THAT FLUTED STEEL PILE SHELLS FOR CAST-IN-PLACE CONCRETE PILES ARE NOT CURRENTLY AVAILABLE.
- PILE EMBEDMENT IS TYPICALLY 1'-0".
- THE 'PEDESTAL ELEVATIONS' TABLE MUST BE SHOWN ON THE PLANS FOR EACH PEDESTAL LOCATION.
- FOR MORE INFORMATION ON ALLOWABLE ALTERNATIVE BLOCKOUT SIZES, REFER TO SECTIONS 106.10.9.2, 107.4.1.5.3, AND 107.5.3 AND ALSO DETAIL NO. 345.01 - ELASTOMERIC BEARING DETAILS. NOTE THAT POTENTIAL ANCHOR RODS FOR MASONRY PLATES NOT SHOWN IN THIS DETAIL.
- ABUTMENT PLAN NAMING CONVENTION - WHEN NECESSARY, IDENTIFY ABUTMENTS WITH DIFFERING DETAILS BY LABELING WITH 1/2 or A/B or A DIRECTIONAL LABEL (NORTH/SOUTH/EAST/WEST).
- REBAR NAMING CONVENTION - IN GENERAL, REBAR RUNNING PARALLEL TO THE BASELINE IS LABELED 'LONGITUDINAL' AND REBAR RUNNING PERPENDICULAR TO THE BASELINE IS LABELED 'TRANSVERSE'. THE EXCEPTION TO THIS CONVENTION IS FOR WINGWALLS. SINCE WINGWALLS CAN HAVE DIFFERING ORIENTATIONS TO THE BASELINE, THE LOCAL CONVENTION FOR WINGWALLS IS APPLIED WHILE LOOKING AT THE WINGWALL ELEVATION. 'LONGITUDINAL' REBAR RUNS INTO THE PAGE AND 'TRANSVERSE' RUNS ACROSS THE FACE. ON PLANS, ALL OF THESE LABELS ARE REPLACED BY ACTUAL BAR MARKS.

